Art of Asking Questions Semester Project

Over the last several weeks, we have been experimenting with techniques/strategies that are designed to ask questions that lead to better answers or tackle problems in a way that facilitates creativity and innovation. You are now ready to develop your semester long projects in this class.

Your semester-long group project is designed to help you notice and reflect on essential skills and abilities that are essential in our personal and professional lives and put them into practice. Many of these are so-called "soft-skills" that lie outside the discipline-specific skill set you will be cultivating in your other classes.

- 1) Creativity
- 2) Navigating ambiguity
- 3) Communicate thoughtfully
- 4) Critically evaluate and synthesize information from disparate sources
- 5) Listen to others---and make sure your body language is commensurate
- 6) Learn from others -as Bill Nye says: "Everyone you meet knows something that you don't"
- 7) Experiment/Prototype mindset---learn what works by doing something
- 8) Adapt

Moving forward, the structure of your projects and the class is focused on intensive-team-based work. Working with your team on this project is your opportunity to recognize and intentionally practice these essential and transferrable skills. We want to be *intentional* about moving toward mastery-- always. Skill-building does not happen magically. When you meet with your group members for any aspect of your project, have an intentional practice in mind for that interaction. What are you going to work on today? What do you want to try to do differently? Be sure to offer feedback to your groupmates.....giving and receiving constructive feedback is an essential skill.

TODAY:

- 1. Go to your Group Collaboration on Canvas and create a google doc for your group.
- 2. Create a group Miro board (Miro.com) or you may use padlet if you prefer. You will need to submit this link to canvas.

3. Start collecting video clips of what you are trying

Your project has five main phases and the requirements for each phase are included below. While expanded information and requirements for each stage are (or will be) on canvas, the lack of a roadmap might feel uncomfortable ---ambiguous. That is intentional. I want to see what you come up with!

1. Inspiration and Exploration: across the next two weeks, you will be cultivating inspiration and exploring ideas during our class time. It is essential that you are present, engaged and participating in this process and it will form part of your grade. We will work through exercises to practice "failing-forward" and identify gaps in our ideas.

Deliverables: . You are evaluated on your personal contribution to your group's work at this stage. You must make 2 substantive contributions to your team's brainstorming google doc on your collaboration page on canvas before the start of class on October 6th at 8:30 am, October 8th at 8:30 am. What is substantive? Concrete ideas that bring something new to your group, provide a way forward, or provide resources to explore.

Understand Deeply: What do we know about your topic? What are the big gaps that need filling? Background research and expanding our knowledge is essential to asking great questions and/or finding innovative solutions.

Deliverables: You are evaluated on your personal contribution to your group's work at this stage on the group google doc.

2. Based on what you have learned, how might you address your problem or answer your question? What is a concrete action you could take? How would you design a study? Develop a prototype? What data will you collect to evaluate your ideas? This will culminate in a project proposal that you will turn in and pitch to Dr. Hansen. Your proposal is due by 8:30 am lecture on October 15th.

Deliverables: You will turn in a project proposal following the format in the guidelines on canvas. Pay attention to the rubric to make sure you have excelled at all elements.

3. Action: Once your project is approved by Dr. Hansen, you will move to make it happen. This will be in the form of a pilot study and video due by lecture on November 5th. You will have data or prototypes in your pilot study. Evaluate your results and propose changes to optimize your project moving forward. You will present these results in your discussion section on November 5th, but the video is due at the start of the lecture session at 8:30am

Deliverables: you will create a short video following the guidelines on canvas. You will update your project proposals to document the results of your pilot study and propose your modifications. Due at the start of lecture (8:30 am on November 5^{th}).

4. Across the next several weeks, you will implement your improvements and collect final data on your study or prototypes. You will synthesize the results and larger implications of your work and share your story the weeks of December 2nd and 9th in the form of a video or presentation to the class.

Essential Requirements:

- 1. We want to spend our time and efforts well. We don't want to be duplicating the efforts of others. Therefore, the topic of your project must be novel. If I can google it (and I will!) and find significant overlap, it will not be approved. That does not mean that we can't expand, modify or improve on the questions or ideas of others. Or apply a novel solution to a different situation. Building on others ideas is essential---replicating them is not.
- 2. Your project must be *doable*. We want to DO things for this project. A critical element of DT is that you iterate: try something, improve upon it etc. You must choose a question that you have a good chance of making progress on in the course of a semester. It is better to choose a small idea and see it to fruition than choosing a big problem/question that leaves you stuck.
- 3. You will collect new data on your question or prototype and use statistics to evaluate how well your question is answered or how well your prototype

- works. Exactly what this will look like depends on your project and is something we will talk about during your project meetings.
- 4. You will submit one video of the results of your pilot project or early prototype (including statistics) ½ way through your project.
- 5. You will make substantial revisions and improvements to your project. Final sharing of your story will use either a video or poster that you present during the final weeks of the semester.

Assignment	Due Date	Points
Exploration Phase Substantive Contribution	October 6 th 8:30 am	10
Exploration Phase Substantive Contribution	October 8 th 8:30 am	10
Work Session Class Activities	In class and discussion	Approximately 30
Project Proposal	October 15 th 8:30 am	25
Pilot Study Video/Presentation	8:30 am November 5th	50
Final Poster or Video presentation	In class week of December 2 nd -9th	50
Peer evaluations	Various	10 pts and Grade adjustments

Individual Assessment in green text

Group Assessments in black text

Project Total Points= 135
Work session and participation = approximately 50 points